

MELKLAR, P. V.

Photography - Films

Form of isopacity of a photographic layer. Dokl. AN SSSR 85 no. 6, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

"APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001033410018-0

MEL'KO, V., inzhener-podpolkovnik

Automatic switch. Tyl i snab.Sov.Voor.Sil 21 no.3:90-91 Mr '61.
(MIRA 14:6)

(Electric switchgear)

APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001033410018-0"

"APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001033410018-0

MELKOBROD, YE.A. and GORBACHOV, F.A.

Physical Principles of Devices and Operation of Aircraft
Instruments. Defense Publ. House (1953) p. 427

APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001033410018-0"

GORBACHEV, F.A.; MELKOBRODOV, E.A.

[Physical principles applied to the design and function of aeronautical instruments] Fizicheskie osnovy ustroistva i raboty aviatcionnykh pri-borov. Moskva, Gos. izd-vo neftianoi promyshl., 1953. 522 p. (MLRA 7:4)
(Aeronautical instruments)

GUDKOVICH, V.M.; MELIKYAN, G.I.; LIKIDANOV, Ye. G.

Aerodynamic studies of fence models. Prudy Aeron. 253:219-231. 1981.
(MIRA 17:1)

MAZO, Ya.A.; MEL'KONOVITSKAYA, I.P.; SAMOSSKIY, V.A.

Temperature dependence of the magnetic properties of sound
carriers. Trudy VNAIZ no.9:57-64 '61. (MIRA 15:9)
(Magnetic recorders and recording)

MELKONYAN, AM M., MIRZAEKYAN, G. I., NIKOGOSYAN, S. V.

"Certain data on the effect of 2-chlorbutadiene-1,3 on the
animal and human organism."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists
and Infectionists, 1959.

KAZARYAN, V.O.; MELKONYAN, A.P.

Significance of growth changes in leaves in the ontogeny of
annuals. Dekl.AN.SSR 21 no.5:231-234 '55. (MLRA 9:4)

1.Botanicheskiy institut Akademii nauk Armyanskoy SSR.Pred-
stavlene G.Ih.Bunyatyanem.
(Leaves) (Annuals)

MELKONYAN, A. P., Cand Tech Sci -- (diss) "Some tasks in the equilibrium of elastic thick plates." Yerevan, 1959. 19 pp with diagrams; (Ministry of Higher Education USSR, Yerevanskiy Polytechnic Institute K. Marks); 150 copies; price not given; (KL, 18-60, 152)

16(1)

AUTHOR:

Melkonyan, A.P.

SOV/22-12-2-4/8

TITLE:

On the Bending of a Thick Double-Layer Plate

PERIODICAL:

Izvestiya Akademii nauk Armyanskoy SSR. Seriya fiziko-matematicheskikh nauk, 1959, Vol 12, Nr 2, pp 61-75 (USSR)

ABSTRACT:

The author considers a freely resting rectangular plate which consists of two thick layers. The moduli of elasticity of the layers are constant but different, the Poisson coefficient is the same. The author investigates two cases of stress :

1.) The stress $p(x,y)$ is representable by a double Fourier series 2.) $p(x,y) = P_0 \sin \frac{\pi x}{a} \sin \frac{\pi y}{a}$, where the plate is a square with the lateral length a . The first general case is solved by applying the solution of Galerkin [Ref 1] for every single layer. The second case is considered as a special case and is investigated especially explicitly. The author carries out a comparison with the approximative solution for thin plates, and he determines for different E_1/E_2 and h/a

Card 1/2

On the Bending of a Thick Double-Layer Plate

SOV/22-12-2-4/8

the numerical value of stresses and bendings.
There are 6 figures, 8 tables, and 3 Soviet references.

ASSOCIATION: Yerevanskiy politekhnicheskiy institut imeni K. Marks'a
(Yerevan Polytechnical Institute imeni K. Marx)

SUBMITTED: August 26, 1958

Card 2/2

MELKONYAN, A.P., inzh.

Axisymmetric bending of a two-layer thick circular plate. Sbor.
nauch. trud ErPI no. 20:169-190 '59. (MIRA 14:5)
(Elastic plates and shells)

MELKONYAN, A.P.

Flexure of a three-layered thick plate. Izv. AN Arm. SSR. Ser.
fiz.-mat. nauk 15 no.5:41-57 '62. (MIRA 15:11)

1. Institut matematiki i mekhaniki AN Armyanskoy SSR.
(Elastic plates and shells)

L-58804-65 ENP(w) EM

ACCESSION NR: AP5012164

UR/0022/65/018/001/0043/0052

AUTHORS: Melkonyan, A. P., Khachatryan, A. A.

11

10

8

TITLE: Bending of rectangular transversely isotropic plates

SOURCE: AN ArmSSR. Izvestiya. Seriya fiziko-matematicheskikh nauk, v. 18, no. 1, 1965, 43-52

TOPIC TAGS: bending stress, rectangular plate, transversely isotropic plate, transverse shear, loaded plate

ABSTRACT: The article deals with the bending of rectangular transversely-isotropic plates, with allowance for the transverse shear, using the theory proposed by S. A. Ambartsumyan (Teoriya anizotrofnykh obolochek [Theory of Anisotropic Shells], Fizmatgiz, M. 1961). A general solution is presented for the problem of the bending of a shell with arbitrary transverse load, in the case when two opposite edges of the plate are freely supported and the two other edges can be secured in various fashions. In particular, the bending is determined of rectangular plates with uniformly distributed load, when

Card 1/2

L 58804-65

ACCESSION NR: AP5012164

the plate is either freely supported over the entire contour or freely supported on two opposite edges, while the other two edges are fixed.
Original article has: 1 figure, 33 formulas, and 2 tables

ASSOCIATION: Institut matematiki i mehaniki AN Armyanskoy SSR (In-
stitute of Mathematics and Mechanics, AN ArmSSR)

SUBMITTED: 27Jun64

ENCL: 00

SUB CODE: AS

NR REF Sov: 003

OTHER: 000

Card

2/2 all P

L 27122-66 EWT(d) IJP(c)

ACC NR: AF6016865

SOURCE CODE: UR/0198/66/002/002/0029/0035

AUTHOR: Melkonyan, A. P. (Yerevan); Khachatryan, A. A. (Yerevan)

47

ORG: Institute of Mathematics and Mechanics, AN ArmSSR, Yerevan (Institut matematiki i mehaniki)

B

TITLE: Stability of rectangular films with transverse isotropy / This paper was presented at the 5th All-Union Conference on Plates and Shells held in Moscow from 3 to 6 February 1965SCIRCE: Prikladnaya mehanika, v. 2, no.2, 1966, 29-35

TOPIC TAGS: computer, computer calculation, shell structure stability/Razdan-2 computer

ABSTRACT: On the basis of the refined theory of anisotropic films of S. A. Ambartsuyan (Teoriya anizotropnykh obolochek — Theory of Anisotropic Shells —, Moscow 1961), the authors present a solution of the problem of the stability of a rectangular, transversely isotropic sheet which is hinge-supported on three sides and free on the fourth side and subjected to a uniform compression on two opposite hinged sides. By the introduction of a new function, the original system of equations of Ambartsuyan is reduced to a system of two independent equations for the normal dislocations and the derived function.

Computations performed on the Razdan-2 computer at the Computer Center of the Academy of Sciences Armenian SSR are tabulated.

Card 1/2

Z

L 27122-66

ACC NR: AP6016865

Orig. art. has: 1 figure, 24 formulas and 2 tables. [JPRS]

SUB CODE: 13, 09 / SUBM DATE: 27Apr65 / ORIG REF: 003

Card 1/

Country : USSR
 Category : CULTIVATED PLANTS. FRUITS. Berries.
 Abs. Jour. : REF ZHUR-BIOL.,21,1958 NO.96146

Author : Melkonyan, A.S.
 Institut. : ARMEHIN Sci. Inst. of Viticulture. Wine-
 Title : Interrelation Between the Above-Ground and Subsoil
 Parts of the Grape Vine in the First Year of
 Planting.
 Orig. Pub. : Byul. nauchno-tehn. inform. arm. n.-i. in-ta
 vinogradarstva. vinozeliya i vodovedstva, 1957,
 No.1, p-12

Abstract : A different number of sprouts were left on one
 year old Armenian and Ararat variety bushes in
 order to study the relation between the above-ground
 part and the roots. Providing a high degree of
 agricultural management, the heavily laden plants
 developed more shoots and leaves, rather than
 producing a better development in both the above-
 ground and below-ground parts of the bush. During
 * Making and Horticulture.

Cart: 1/3

159

Country :
 Category : **APPROVED FOR RELEASE: 06/20/2000** CIA-RDP86-00513R001033410018-0
 CULTIVATED PLANTS. FRUITS

Abs. Jour. : REF ZHUR-BIOL.,21,1958,NO.96146

Author :
 Institut. :
 Title :
 Orig. Pub. :
 Abstract : the first year of planting the subsoil portion
 grew more in length than the above-ground part.
 The root system branched out strongly. This
 facilitated the water supply and nutrient uptake
 of the plants. The optimum in this test was the
 laden variant where three knots were left with
 2-4 eyes apiece. The overall shoot growth in this
 variant was 4 times larger, the leaves twice as
 large, the roots with all elements considered were
 better developed than in the variant where only

Cart: 2/3

MELKONYAN, A. S.: Master Agric Sci (diss) -- "The effect of various loading norms on the strength of young grape vines". Odessa, 1958. 20 pp (Min Agric USSR, Odessa Agric Inst), 170 copies (KL, No 14, 1959, 121)

MELKONYAN, A.S.

Studying the nature of the vigorous growth of grape shoots.
Izv. AN Arm.SSR. Biol.nauki 14 no.10:59-68 0'61 (MIRA 16:7)

1. Armyanskij nauchno-issledovatel'skiy institut vinogradarstva,
vinodeliya i plodovodstva Ministerstva sel'skogo khozyaystva
Armyanskoy SSR.

(GRAPES)

L-22516-66

ACC-NR: AP6005085

SOURCE CODE: UR/0262/65/041/003/0184/0188
19
BAUTHOR: Melkonyan, A. S.; Sarkisova, M. M.

ORG: Institute of Viticulture, Viniculture and Fruit Growing, Ministry of Agriculture Armenian SSR (Institut vinogradarstva, vinodeliya i plodovodstva Ministerstva sel'skogo khozyaystva Armyanskay SSR)

TITLE: The effect of gibberellin on green grape seedlings

SOURCE: AN ArmSSR. Doklady, v. 41, no. 3, 1965, 184-188

TOPIC TAGS: plant physiology, plant growth

ABSTRACT: Grape seedlings of the Tokun and Armeniya varieties were sprayed with 0.01% and 0.005% solutions of gibberellin in order to determine gibberellin's impact on the growth of the plants. The gibberellin effect on growth of leaves and roots in the plants is presented in tabular form. It is concluded that gibberellin has a pronounced stimulating effect in both the leaf and root systems. The paper was presented by M. Kh. Chaylyakhanyi, Corresponding Member AN Armenian SSR on 26 March 1965. Orig. art. has: 2 tables, 1 figure.

SUB CODE: 06/

SUBM DATE: 00/

ORIG REF: 005/

OTH REF: 000

Card 1/1 BK

MELKONYAN, G. A.

Melkonyan, G. A.: "Unusual type of osteogenesis outside the organism,"
(Report), Trudy III Zakavkazsk. s"yezda khirurgov, Yerevan, 1948
(on cover: 1949), p. 705-713

SO: U-5240, 17 Dec. 53, (Letopis 'zhurnal 'nykh Statey, No. 25, 1949).

OVSEPYAN, K.Kh.; MELKONYAN, A.S.

Calculation of hydromechanical parameters in computing the
resynchronization of hydraulic units. Izv.AN Arm.SSR.Ser.tekh.
nauk 15 no.6:33-40 '62. (MIRA 16:2)

1. Institut vodnykh problem AN Armyanskoy SSR.
(Electric generators)

MELKONYAN, G.

Sodium calcium silicate as a complex raw material for the
glass industry. Prom. Arm. 6 no.6:34-38 Je '63.

(MIRA 16:8)

1. Glavnnyy inzh. Razdanskogo gorno-khimicheskogo kombinata.
(Sodium calcium silicates)
(Armenia—Glass manufacture)

MELKONIAN, G. A.

MELKONIAN, G. A.

Possibility of extraorganic osteogenesis following anabiosis of
bone cells. Usp. Sovrem. biol. 30:2(5), Sept.-Oct. 50. p. 309-11

L. Yerevan.

CLML 20, 3, March 1951

MAL'KONYAN, G.I., aspirant

A particular case of asymmetric flow around a plate in confined
stream. Trudy LIIVT no.20:183-192 '53.
(Hydrodynamics)

(MIRA 12:1)

MELKONYAN, G. I.

"Some Instances of the Breakway Streamlining of Floodgates
in Water-Power Stations." Cand Tech Sci, Leningrad Inst of
Water Transport Engineers, Leningrad, 1954. (RZhMekh, Mar 55)

SO: Sum. No. 670, 29 Sep 55--Survey of Scientific and Technical
Dissertations Defended at USSR Higher Educational Institutions (15)

MELKONYAN, G. I.

Jet Asymmetric Circulation Around an Inclined Plate in a Bounded Flow

The author examines the problem of the breaking -away steady state circulation around a plate of a stream of ideal incompressible imponderable liquid in a channel with parallel walls, with the plate inclined at some angle to the axis of the channel and situated asymmetrically relative to the walls of the channel. He shows how the solutions of the equations can be obtained but does not indicate their practical application. (RZhMekh, No. 6, 1955) Tr. Leningr. In-ta Inzh. Vodn. Transp.: No. 21, 1954, 165-181.

SO: Sum. No. 744, 8 Dec 55 - Supplementary Survey of Soviet Scientific Abstracts (17)

124-58-6-6612

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 6, p 45 (USSR)

AUTHOR: Melkonyan, G. I.

TITLE: On the Separated Flow Past the Water Gates of Hydraulic Structures (K voprosu otryvnogo obtekaniya zatvorov gidrosooruzheniy)

PERIODICAL: Tr. Leningrad. in-ta inzh. vod. transp., 1956, Nr 23, pp 101-109

ABSTRACT: The first part contains an analysis of the possibility of applying the classical theory of jets to the practical problems of hydraulic engineering dealing with the flow of a fluid past various types of obstacles. Along with the known Betz-Peterson criterion, the author introduces another criterion for applying the jet theory, namely, the ratio of the size of the outflow orifice to the length of the projection of the obstacle exposed to the fluid flow onto an axis perpendicular to the axis of the flow. A comparison of some experimental and theoretical results leads the author to believe that this ratio should not exceed 1.5. In the second part the author examines the problem of the flow of an ideal heavy incompressible fluid out from under a gate valve.

Card 1/2

124-58-6-6612

On the Separated Flow Past the Water Gates of Hydraulic Structures (cont.)

An approximate solution to the problem is provided with the aid of a conformal representation of the region of the complex potential and the region of the velocity hodograph onto an auxiliary semiplane. The solution contains elliptical functions. The solution to the problem is approximate in that the line which in the velocity-hodograph plane corresponds to a free surface is replaced by an arc of an ellipse. It should be mentioned that a more general solution to this same problem, by means of a similar method, was obtained by Marchi (Marchi, Enrico, Ann. mat. pura ed appl., 1953, Vol 35, pp 327-341; RzhMekh, 1955, Nr 1, p 154). In contrast to the present author, Marchi represents the hodograph region (likewise approximated by a quarter ellipse) on a quarter region lying outside a unit-radius circle.

1. Fluid flow--Theory
2. Water--Control

G. N. Pykhteyev

Card 2/2

MELKONYAN, G.I.

Problem on arched streamlined jets surrounded by plane restricted currents and their practical applications. Izv. Akad. Nauk SSSR. Ser. fiz.-mat. nauk 10 no.2: 39-104 '57. (MLC 10:2)

L. Vodno-energeticheskiy institut Akademii nauk Armyanskoy SSRR.
(Jets--Fluid dynamics)

MELKONYAN, G.I., kand.tekhn.nauk; CHMEL', Yu., inzh.

Theory of shield opening design. Trudy LIVT no.8:16-22 '60.
(MIRA 15:2)
(Hydraulics)

BORODKIN, B.S., kand.tekhn.nauk; MELKONYAN, G.I., kand.tekhn.nauk

Use of compressed air to form nonfreezing areas in water reservoirs.
Trudy LIVT no.8:23-34 '60. (MIRA 15:2)
(Reservoirs)(Ice on rivers, lakes, etc.)(Compressed air)

REMARKS, G.I., hand-to-hand; G.I.D., . . ., hand-to-hand.

Designing air pipes of pneumatic devices for winter; non-freezing water pipe. Classification v.s. Today 1/19/42 11:33-
42 '61. (L... 34:1)

(Compressed air)
(Water, Cooling oil)

BALANIN, Vasilii Vasil'yevich, kand. tekhn. nauk, dots.; BORODKIN, Boris Solomonovich, kand. tekhn. nauk, dots.; MELKONYAN, Georgiy Ivanovich, kand. tekhn. nauk, dots.; KONOVALOV, I.M., prof., red.; LOBANOV, Ye.M., red.

[Utilizing the heat of deep waters to maintain ice-free water areas] Ispol'zovanie tepla glubinnykh vod vodoemov dlia podderzhaniia nezamerzaiushchikh akvatorii. Moskva, Transport, 1964. 271 p. (MIRA 18:2)

1. Leningradskiy institut vodnogo transporta (for Balanin, Borodkin, Melkonyan).

L 5299-66 EWT(m)/T

ACC NR: AP5024963

SOURCE CODE: UR/0286/65/000/016/0024/0024

AUTHORS: Melkonyan, G. S.; Lileyev, I. S.; Darbinyan, M. V.; Arakelyan, O. I.;
Dovlatyan, A. N.; Oganesyan, M. L.; Tokmadzhan, G. S.

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Q3

ORG: none

TITLE: A method for obtaining zeolites. Class 12, No. 173720 (announced by
Scientific Research Institute of Stone and Silicates (Nauchno-issledovatel'skiy
institut kamnya i silikatov))

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 24

TOPIC TAGS: zeolite, perlite, volcanic glass

ABSTRACT: This Author Certificate presents a method for obtaining zeolites from
natural minerals by treating the latter with a base at a temperature of 50-200°C.
The resulting zeolite is then strained and washed. To increase the amount of
available raw materials and to lower the cost of zeolites, perlite rock is used
as the original raw material.

SUB CODE: MT, GC / SUBM DATE: 12May64 / ORIG REF: 000 / OTH REF: 000

Card 1/1

UDC: 661.183.6

09010539

MELKONYAN, L. G.

Dissertation: "The Propagation of Ultrasound in Binary Mixtures Forming Additive Compounds, and the Connection Between the Velocity of Ultrasound and Other Physicochemical Properties of Liquids." Cand Chem Sci, Yerevan Polytechnic Inst, Yer Yerevan, 1954. (Referativnyy Zhurnal--Khimiya, Moscow, No 11, Jun 54)

SO: SUM 318, 23 Dec 1954

MELKONIAN, L.G.

Systematization of 40 cases of anomalies of renal arteries.
Acta med. jugosl. 8 no.2:257-268 1954.

1. Institut d'Anatomie de l'Universite de Geneve et L'Institut
d'Anatomie de Zagreb.

(KIDNEYS, blood supply
abnorm. of renal arteries)
(ABNORMALITIES
renal arteries)

MELIKONIAN, L.G.

Systematization of 44 cases of anomaly of the renal arteries.
Acta med. jugosl. 8 no.3:322-368 1954.

1. Iz anatomskog instituta Med. fakulteta u Zenovi i Anatomoskog
instituta Med. Fakulteta u Zagrebu.
(KIDNEYS, blood supply
arterial abnorm.)
(ABNORMALITIES
renal arteries)

MELKONYAN, L. G. and KUDRYAVTSEV, B. B.

"Velocity of Sound in Liquid Mixtures Whose Components Form Chemical Compounds;
a report presented at a conference of professors and teachers of the institutes
of the Ministry of Education RSFSR and published in the "Application of Ultrasonics
to the Investigation of Substances," Moscow, 1955.

MELKONYAN, L G.

USSR/Physical Chemistry - Thermodynamics. Thermochemistry. Equilibrium.
Physicochemical Analysis. Phase Transitions, B-8

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 6103⁴

Author: Melkonyan, L. G., Kudryavtsev, B. B.

Institution: None

Title: Velocity of Sound in Liquid Mixtures the Components of Which
Form a Chemical Compound

Original
Periodical: Sb: Primeneniye ul'traakustiki k issled. veshchestva, No 2,
Moscow, Izd-vo MOPI, 1955, 35-59

Abstract: There were measured interferometrically the velocity (a) of ultra-
sound (10^6 hertz) in mixtures of different concentration: aniline-
phenol and phenol-paratoluidine (45° - 60°), aniline-orthocresol
(35° - 50°) and isoamyl alcohol-nitrobenzene from (25° - 45°). It is
shown that formation of a compound is not necessarily associated
with an anomalous change in a . Determination of molecular velocity
of sound ($R = a_1/3V_m$; V_m -- molecular volume) does not permit

Card 1/2

USSR/Physical Chemistry - Thermodynamics. Thermochemistry. Equilibrium.
Physicochemical Analysis. Phase Transitions, B-8

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61034

Abstract: determination of the formation of a chemical compound in the mixture. The change of R with temperature that is sometimes observed is apparently not connected with either formation of a chemical compound or molecular association. Results of measurements of sound velocity in ~~any~~ mixtures and of their viscosity coefficient η indicate the absence of a univalent correlation between a and η : monotonous change in a on change in composition of the mixture can occur in conjunction with the presence of an extremum on the η isotherms. On the basis of acoustical measurements there have been calculated the constants a of van der Waals equation. Formation of a chemical compound in the mixture does not cause sharp changes in the magnitude of a which is due to the fact that forces of molecular interactions, in the opinion of the authors, have a different nature from that of the forces which cause the formation of a chemical compound.

Card 2/2

MELKONYAN, L.G.
Category : USSR/Acoustics - Ultrasound

J-4

Abs Jour : Ref Zhur - Fizika, No 1, 1957 No 2135

Author : Melkonyan, L.G.

Title : Speed of Ultrasonic Waves and Intermolecular Attraction in Binary Liquid Mixtures, Forming a Chemical Compound

Orig Pub : Primeneniye ul'traakustiki k issled. veshchestva. Vyp. 3. M., MOPI, 1956,
31-49

Abstract : It is indicated that it is possible to determine the Van-der-Waals constant a_y at various temperatures using data on the speed of sound, the density, and the molecular weights. In liquid mixtures, in which compounds or associations are possible, the intermolecular forces can be characterized by the quantity $a_y = \alpha^2 v/2$, (α -- speed of sound, v -- molecular volume). An investigation of the dependence of a_y on the composition of the liquid mixture may provide information on whether a chemical compound will occur and whether it will be stable. On the basis of experimental data, it is shown that in ideal or nearly-ideal mixtures a_y is a linear function of the composition. Increasing the temperature decreases a_y (it increases in water). In aqueous solutions of alcohols and of organic acids the a_y vs. composition curve passes through

Card : 1/2

Category : USSR/Acoustics - Ultrasound

J-4

Abs Jour : Ref Zhur - Fizika, No 1, 1957 No 2135

a maximum. Changing the length of the organic molecule causes a regular change in the position of the maximum. In the case of aqueous solutions of alcohols, the α_y vs. composition isotherms obtained for various temperature, intersect at a single point, which is characteristic for each solution and which shifts regularly upon transition from the lower homologue to the higher one. In the case of aqueous solutions of mineral acids, α_y varies almost linearly with the concentration of the acid. Bibliography, 11 titles.

Card : 2/2

DOKUKIN, A.V., prof., doktor tekhn.nauk, red.; KOZIN, Yu.V., inzh., red.; LIVSHITS, I.I., kand.tekhn.nauk, red.; MEL'KUMOV, L.G., inzh., red.; SMAGOVSKIY, Ye.S., kand.tekhn.nauk, red.; GRINSHPUN, L.V., inzh., red.; MIRSKAYA, V.V., red.izd-va; ALADOVA, Ye.I., tekhn. red.; SHKLYAR, S.Ya.

[Automatic control in the coal industry] Avtomatizatsiya ugol'noi promyshlennosti. Ugletekhizdat, 1959. 218 p. (MIRA 12:3)
(Coal mines and mining) (Automatic control)

PAGE 1 BOOK INFORMATION

207/1312

Voronezhskaya konferentsiya, professor I. propovedatel' yedinstvennyi zashchitnyi.

Prilozhenie ultrazvoka k issledovaniyu veshchestv; trudy konferentsii, vyp. 9 (Application of Ultrasonics in the Study of Substances), No. 9, Moscow, Izd. Nauk. 1959. 265 p. Errata slip inserted. 1,000 copies printed.

Editor: V. P. Kondratenko, Professor, and S. B. Emel'yantsev, Professor.

NOTES: This collection of articles is intended for scientists specializing in ultrasonics and for those interested in the application of ultrasonics to the study of properties of materials, and to the quality control of machine parts and structural elements.

CONTENTS: The collection constitutes the proceedings of the All-Union Conference of Professors and Teachers of Pedagogical Institutions. The article reports on recent theoretical and experimental investigations in the field of ultrasonics and discusses the application of electronics to the study of ultrasonics.

Card 47

207/1312

Application of Ultrasonics (Cont.)

- Sapozhnikov, A. I. and I. G. Melnikova [Uprugost' polystyrola. 1a-4 (Stress in Poly-Styrene Polymers). Dependence of Stress of Ultrasonic and Curtaile Rayleigh waves on Temperature and Pressure of Liquid Binary Systems as Their Composition and Temperature].
72
- Sopylevich, N. P. [Difraktsionnyi institut: spred ar ultrazvokom s peremennymi temperaturami v tsirkuul'nykh organicheskikh sostoyaniyakh].
63
- Sorokin, M. A. [Moskovskii pedagogicheskii institut imeni Karpova]. [Measurement of Absorption of Ultrasonic Waves in Organic Liquids in the Liquid-Crystal Transition Region].
95
- Sotova, A. V. and S. B. Emel'yantsev. [Moskovskii pedagogicheskii institut imeni Karpova]. Investigation of the Behavior of Cationization Reactions. [Kationizatsiya].
207
- Sotova, A. V. and S. B. Emel'yantsev. [Moskovskii pedagogicheskii institut imeni Karpova]. Ionization Mechanism in Butyl Acetate. [Ionizatsiya].
217

207/1312

Application of Ultrasonics (Cont.)

- Sopotnik, A. P. [Inst. ped. i estet. lesnogo i lesno-podlesnogo byudzhetnogo (Institute of Forest Pedagogical and Forest-Park Educational Institute)]. Rich Figures in Nature. [Narodnye rukopisi].
125
- Sopotnik, A. P. and V. Tsv. Karpovskaya [Moskovskii pedagogicheskii institut imeni Karpova]. Effect of Crystallinity of the Academy of Sciences, USSR]. Effect of the Vibration of Fossil Shells on Crystallization in Thin Layers.
227
- Sopotnik, A. P., A. F. Prokof'ev, and V. A. Cherkashin. [Krasnoyarsk. inst. fiz. i fiz. chisl. (Krasnoyarsk Pedagogical Institute), Krasnoyarsk. inst. fiz. Akademii Nauk (Krasnoyarsk Institute of Physics of the Academy of Sciences, USSR)]. Effect of Ultrasonics on the Magnetic Properties of Ferrimagnetics.
124
- Sopotnik, A. P., A. S. Melnikov, and A. P. Kondratenko [Moskovskii pedagogicheskii institut imeni Karpova]. Effect of Ultrasonics on the Luminescence of Phosphors.
129

Card 57

MELKONYAN, L. G.

46

PHASE I BOOK EXPLOITATION

SOV/6195

Nauchnaya konferentsiya institutov khimii Akademiy nauk Azerbaydshanskoy, Armyanskoy i Gruzinskoy SSR. Yerevan, 1957.

Materialy nauchnoy konferentsii institutov khimii Akademiy nauk Azerbaydzhanskoy, Armyanskoy i Gruzinskoy SSR (Materials of the Scientific Conference of the Chemical Institutes of the Academies of Sciences of the Azerbaijani, Armenian, and Georgian SSR) Yerevan, Izd-vo AN Armyanskoy SSR, 1962. 396 p. 1100 copies printed.

Sponsoring Agency: Akademiya nauk Armyanskoy SSR. Institut organicheskoy khimii.

Resp. Ed.: L. Ye. Ter-Minasyan; Ed. of Publishing House: A. G. Slikuni; Tech. Ed.: G. S. Sarkisyan.

PURPOSE: This book is intended for chemists and chemical engineers, and may be useful to graduate students engaged in chemical research.

COVERAGE: The book contains the results of research in physical, inorganic, organic, and analytical chemistry, and in chemical engineering, presented at the Scientific Conference held in Yerevan, 20 through 23 November 1957. Three reports of particular interest are reviewed below. No personalities are mentioned. References accompany individual articles.

Materials of the Scientific Conference (Cont.)	SOV/6195
Activity and Structure of Cracking Catalysts	35
<u>Melkonyan, L. G., and A. M. Zarafyan.</u> Dependence of the Speed of Propagation of Ultrasound on the Structure of Molecules of Organic Liquids and on Their Physical Constants	48
<u>Krmoyan, T. V.</u> Study of the Electroconductivity of Concentrated Alkali Solutions	62
<u>Mamedov, Kh. S.</u> The Crystal Chemistry of Monosilicates	82
GENERAL AND INORGANIC CHEMISTRY	
<u>Shishniashvili, M. Ye., and A. I. Avsarkisova.</u> Enriched Askanite Gel and Its Possible Application	90
<u>Miskarli, A. K.</u> New Protective Colloids for Stabilizing Clay Systems	98

Card 3/11

1/2

MELKONYAN, L.G.; BAGDADARYAN, R.V.

Determination of the molecular weight composition of hairite by
nephelometric titrations. Izv. AN SSSR. Khim. nauki 18 no.4:333-
340 '65. (MIR 18:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proyektnyy institut
polimernykh produktov. Submitted August 24, 1964.

MELKONYAN, L.G.; BAGDASARYAN, R.V.; GEVORKYAN, A.V.

Problem of evaluation of δ -viscosity and the thermodynamic elasticity of macromolecules of polychloroprene rubber. D.R.I.
AN Arm. SSR 41 no.1:34-40 '65. (MTCU 78:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy pryektnyy institut
polimernykh produktov. Submitted February 20, 1965.

MELKONYAN, L.I.

Stratigraphy of Miocene sediments in the Karashor Depression.
Trudy VSEGEI 46:282-285 '61. (MIRA 14:11)
(Turkmenistan--Paleontology, Stratigraphic)

GASPARYAN, L.B.; MELKONYAN, N.R.; DARBINYAN, O.A.

Ancient ruins near the village of Argavand used as fertilizer [in Armenian with summary in Russian]. Izv. AN Arm. SSR. Biol. i sel'khoz. nauki 4 no.6:555-561 '51. (MLRA 9:8)
(Echmiadzin District--Fertilizers and manures)

GASPARYAN, O.B.; MELKONYAN, N.R.

Trilonometric determination of some ash constituents in plants.
Izv. AN Arm. SSR. Biol. nauki 14 no.7:57-62 J1 '61. (MIRA 14:9)
(PLANTS--CHEMICAL ANALYSIS)

ABOVIAN, S. B.; BAGDASARYAN, G. P.; KAZARYAN, G. A.; KARAPETYAN, K. I.;
MALKHASYAN, E. G.; MELIKSETYAN, B. M.; MNATSAKANYAN, A. Kh.;
CHIBUKHCHYAN, Z. O.; SHIRINYAN, K. C.; MELKONYAN, R. L., otv.
red.; CHAKHALYAN, TS., tekhn. red.; NUNYAN, S., tekhn. red.

[Chemical composition of igneous and metamorphic rocks in the
Armenian S.S.R.] Khimicheskie sostavy izverzhennykh i metamor-
ficheskikh gornykh porod Armianskoi SSR. [By] S. B. Abovian i dr.
Erevan, Izd-vo Akad. nauk Armianskoi SSR, 1962. 433 p.

(MIRA 16:2)

1. Akademiya nauk Armyanskoy SSR, Eriwan. Institut geologiche-
skikh nauk.

(Armenia—Rocks, Igneous—Analysis)
(Armenia—Rocks, Crystalline and metamorphic—Analysis)

MITIN, Mikhail Nikolayevich; VELIKONAN, Rafael' Iagamovich;
RYABINOK, A.G., red.

[Electrochemical dimensional machining of diesel engine
parts] Elektrokhimicheskaiia razmernaia obrabotka detalei
dizel'noi apparatury. Leningrad, 1962. 16 p.
(NIKA 17:0)

MITIN, Mikhail Nikolayevich. MELKONYAN, Rafael' Vaganovich;
RYABINOK, A.G., red.

[Electrochemical dimensional machining of diesel engine
parts] Elektrokhimicheskaya razmernaya obrabotka detalei
dizel'noi apparatury. Leningrad, 1964. 16 p.
(MIRA 17:9)

MKRYAN, G.M.; MUDZHOYAN, Sh.L.; PAPAZYAN, H.A.; MELKONYAN, S.A.

Reactions of active methylene groups of acetylenic compounds. Izv. AN
Arm. SSR. Khim. nauki 15 no.1:107-108 '62. (MIRA 15:7)

1. Yerevanskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta
sinteticheskogo kauchuka imeni akad. Lebedeva.
(Methylene group) (Acetylene compounds)

VARTYANYAN, S.A.; TOSUNYAN, A.O.; MELKONYAN, S.A.

Chemistry of vinylacetylene. Part 48: Order of the addition
of chloromethyl ethers to isopropenylacetylene and some trans-
formations of the alkoxy chlorides obtained. Izv.AN Arm.SSR.
Khim.nauki 17 no. 2:184-190 '64. (MIRA 17:6)

1. Institut organicheskoy khimii AN Armyanskoy SSR.

L 50016-65

EWT(m)/EPF(c)/EMP(j)/EWA(c) PC-4/PR-4 RM

ACCESSION NR: AP5010262

UR/0171/65/018/001/0032/0038

AUTHOR: Vartanyan, S. A.; Tosunyan, A. O.; Mesropyan, L. G.; Melkonyan, S. A.

TITLE: Chemistry of vinylacetylene. LVI. Addition of chloromethyl ethers to methylvinylvinylethyneylchloromethane and 1-vinylethyneyl-1-chlorocyclohexane and some conversions of the obtained chlorides

SOURCE: AN ArmSSR. Izvestiya. Khimicheskiye nauki, v. 10, no. 1, 1965, 32-38

TOPIC TAGS: organic chemistry, ether, unsaturated hydrocarbon, liquid hydrocarbon, methylation

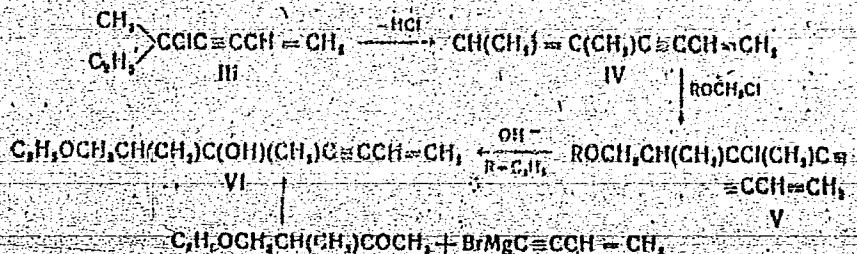
ABSTRACT: This is a part of the continuous investigation of addition reactions of chloromethyl ethers [Zh OKh 33, 62 (1963)]. The purpose of this investigation was to determine the order and position of the addition of chloromethyl ethers to methylvinylvinylethyneylchloromethane and 1-vinylethyneyl-1-chlorocyclohexane. During the addition of chloromethyl ether to methylvinylvinylethyneylchloromethane (III) in the beginning of the reaction splitting of HCl takes place with formation of 5-methyl-1,5-heptadiene-3-yne (IV), followed by the addition of chloromethyl ether to diyne (IV) in the 5,6 position along the substituted vinyl group, thus producing

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L 56016.55

ACCESSION NR: AP5010262

5,1-dimethyl-5-chloro-7-alkoxy-1-heptene-3-yne:



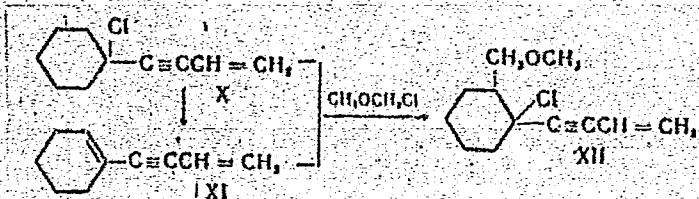
Chloride (V) was also obtained by the addition of one molecule of chloromethyl ether to dienyne (IV). Its structure was determined by IR spectroscopy. The second molecule of chloromethyl ether is always added in the 1,4 position along the vinyl radical, forming the unstable dichloride (VII). An investigation was also made of the addition of chloromethyl ether to 1-vinylethynyl-1-chlorocyclohexane (X) and vinyl- Δ^1 -cyclohexenylacetylene (XI) as follows

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L 56016-65

ACCESSION NR: AP5010262

2



The formation of the same monochloride (XII) in both cases indicates that in both cases HCl is split off from monochloride (X) forming diene (XI). The structure of (XII) was determined by hydrolysis with 10% aqueous NaOH to the corresponding carbinol. The latter, like other carbinols, undergoes isomerization under the action of mercuric sulfate in anhydrous methanol forming β -methoxyketone.⁷ This indicates that the hydroxyl group in carbinol is in the α -position to the acetylene band, which proves the order of the addition of chloromethyl ether to diene (XI).

ASSOCIATION: Institut organicheskoy khimii AN ArmSSR (Institute of Organic Chemistry AN ArmSSR)

Card 3/4

I. 56016-65

ACCESSION NR: AP5010262

SUBMITTED: 23Mar64

ENCL: 00

SUB CODE: OC

NO REF Sov: 005

OTHER: 001

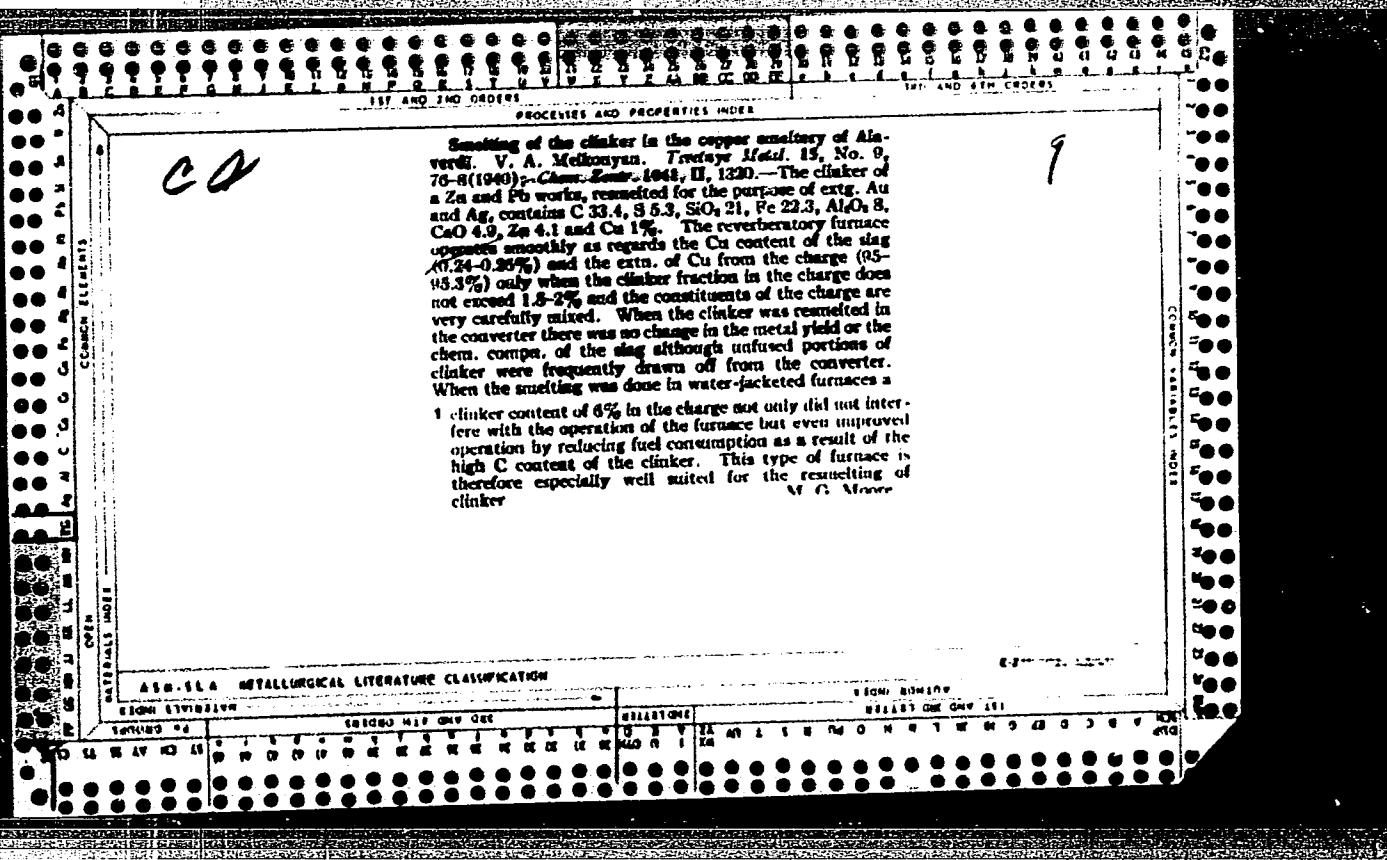
CCW

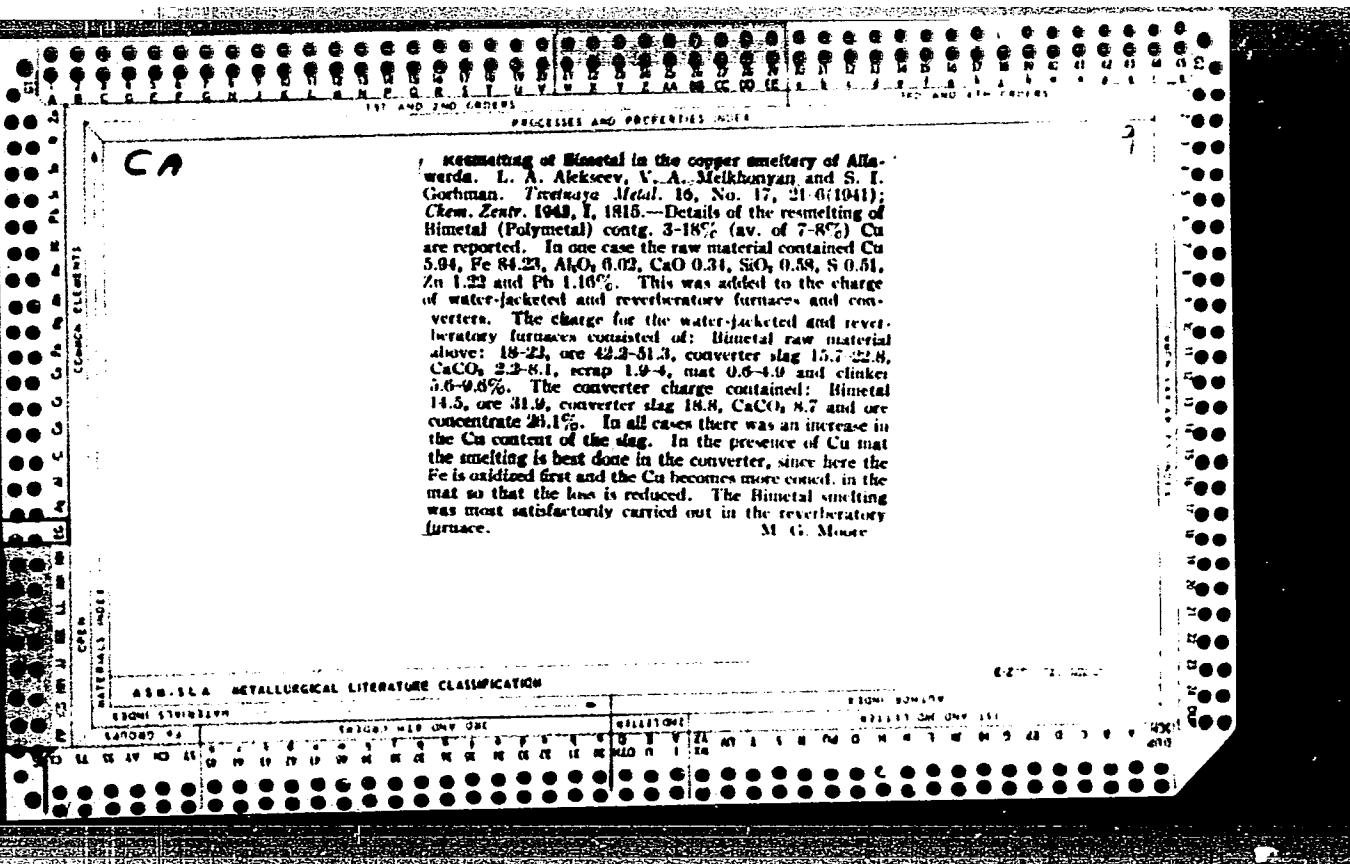
Card 4/4

MELKONYAN, T. G.

24413 MELKONYAN, T. G. Ognestrel'nyye osteomielity tazovykh kostey bez povrezhdeniya organov taza. Sbornik nauch. Trudov (Yerevansk. nauch.-issled. LI-T ortopedii i vosstanovit khirurgii), 1, 1949, s. 37-40.

SC: Letopis, No. 32, 1949.





SARKISYAN, A.M.; AVANESYAN, T.G.; MELKONYAN, V.A.; GAZAROV, A.T.

Preparation of slag for casting into stones. Patent U.S.S.R. 77,344, Dec.
31, 1949.
(CA 47 no.19:10196 '53)

MELKONYAN, V. A.

320 Kak Poluchaut Tyanzhelyye I Legkie Tsvetnie Metal'y. Yerevan', "ipetrat, 1954
90c. 3 ill. 20SM. 1.500 Ekz. Nr. 15 K. Na Arm. yaz. (54-54226)
661.2

SC: Knizhnaya, Letopis, Vol. 1, 1955

MELKONYAN, V., kand.tekhn.nauk; BRIK, L., inzh.

Investigating causes of poor weldability of rolled wire rods
prepared from Alaverdi wire-bar copper. Prom.Arm. 4 no.1:60-64
Ja '61. (MIRA 14:6)

I. Nauchno-issledovatel'skiy gornometallurgicheskiy institut
Sovnarkhoza ArmSSR (for Brik).
(Copper--Testing)

LUR'YE, I.; MELKONYAN, V.; SUKIASYAN, A.; KURGINIAN, S.

Organization of the production of steel and alloys for the
electric industries in Armenia. From.Arm. 5 no.3:10-14 Mr '62.
(MIRA 15:4)

1. TSentral'nyy nauchno-issledovatel'skiy institut chernoy
metallurgii im. I.R.Bardina (for Lur'ye). 2. Nauchno-issledo-
vatel'skiy gornometallurgicheskiy institut Sovnarkhoza
Armyanskoy SSR (for Kurginyan).
(Armenia—Steel industry)

MELKONYAN, V., kand.tekhn.nauk

"Copper mines and mining in prerevolutionary Armenia and foreign capital"
by I.G. Kasparova. Prom.Arm 5 no.6;76-78 My '62. (MIRA 15:7)
(Armenia—Copper mines and mining) (Kasparova, I.G.)

MELKONYAN, V.A.

Nonferrous metallurgy in Armenia. Izv. vys. ucheb. zav.;
tsvet. met. 7 no. 4:161-167 '64 (MIRA 19:1)

1. Armyanskiy nauchno-issledovatel'skiy gornometallurgicheskiy
institut.

KRASIL'NIKOV, N.A.; BOLTYANSKAYA, E.V.; SOKOLOV, A.A.; MELKONYAN, Zh.

Flagelliform outgrowths in Azotobacter. Dokl. AN SSSR 164 no.4:931-
933 O '65. (MIRA 18:10)

1. Moskovskiy gosudarstvennyy universitet. 2. Chlen-korrespondent
AN SSSR (for Krashil'nikov).

KIRAKOSYAN, A.V.; MELKONYAN, Zh.S.; ANANYAN, L.G.

Effect of pH medium on the development of ecologic forms of
Azotobacter chroococcum. Vop. mikrobiol. no.2:87-104 '64.
(MIRA 18:3)

"APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001033410018-0

KIRAKOSYAN, A.V.; MELKONYAN, Zh.S.

Intraspecific relationships in Azotobacter. Vop. mikrobiol. no.2:
73-86 '64.
(MIRA 18:3)

APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001033410018-0"

KIRAKOSYAN, A.V.; MELKONYAN, Zh.S.

New varieties of Azotobacter agile from soils of the Armenian
S.S.R. Izv. AN Arm. SSR. Biol. nauki 17 no.4:33-42 Ap '64.
(MIRA 17:6)

1. Institut mikrobiologii AN Armyanskoy SSR.

ZUBKIN, A.; MEL'KOV, A.

Means and methods of decontamination. Voen.znan. 31 no.8:24 Ag '56.
(NLRB 9:11)

(Decontamination (from gases, chemicals, etc.))

MELKOV, A., inzhener.

More attention to the mechanization of accounting. Muk.-elev.prom.
20 no.8:10-11 Ag '54. (MIRA 7:9)

1. Vsesoyuznoye ob"yedineniye Zagotzerno.
(Grain trade--Accounting)

MELKOV, A.

MELKOV, A.

Use of billing machines in elevators and storage points of the Office
of Grain Procurement. Mul.-elev.prom. 21 no.5:16-17 My '55.
(MIRA 8:9)

1. Rossiyskaya respublikanskaya kontora Zagotzerno.
(Electronic office machines)

MELKOV, A., inzh.

Calculating machines. Nauka i pered. op. v sel'khoz. 8 no.4:31-33
Ap '58. (MIRA 11:5)

(Calculating machines)

"APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001033410018-0

MELKOV, A.

Utilize calculating machines better. Sots. trud 8 no.12:
(MIRA 17:2)
71-73 D '63.

APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001033410018-0"

MELKOV, A.A., inzh.

Mechanization of engineering calculations at a design institute.
Mekh. i avtom. proizv. 17 no.5341-43 My '63. (MIRA 16:6)

(Calculating machines)

MELKOV, A.A., inzh.

Using calculating and tabulating machines in mechanizing design
and estimation. Mekh.i avtom.proizv. 17 no.9:29-32 S '63.
(MIRA 16:10)

MELKOV, A.A., inzh.

Mechanization of the planning of the distribution of industrial
production. Mekh. i avtom.proizv. 19 no.3:40-44 Mr '65.
(MIRA 18:4)

L 21671-66 EAT(1)/EVA(h)
ACC NR: AP6003563

SOURCE CODE: UR/0109/66/011/001/0150/0151

AUTHOR: Deryugin, I. A.; Konchits, A. A.; Melkov, G. A.

ORG: none

TITLE: Frequency doubling in ferrites

SOURCE: Radiotekhnika i elektronika, v. 11, no. 1, 1966, 150-151

TOPIC TAGS: frequency doubling, frequency multiplier, ferrite

ABSTRACT: In conventional frequency multipliers, the ferrite functions under ferromagnetic resonance conditions at the double frequency; hence, with high power levels, the ferrite overheats, and the operation becomes unstable. It is theoretically shown that the double-frequency transverse magnetization occurs at two values of the constant field: $H_1 = \omega/\gamma$ and $H_2 = 2\omega/\gamma$. Therefore, the possibility exists of doubling the frequency without resorting to double-frequency resonance. Experimental curves show that: (1) At low power levels, the resonant frequency doubling has advantages as the ferrite strongly absorbs the doubled frequency at $H_0 = H_1 = 2\omega/\gamma$; (2) At high power levels, the nonresonant doubling is so efficient that the ferrite temperature is practically equal to room temperature. Orig. art. has: 1 figure and 13 formulas.

SUB CODE: 09 / SUBM DATE: 26Mar65 / ORIG REF: 001 / OTH REF: 002

UDC: 621.374.4:621.318.134

Card 1/1 *JPC*

L 03753-67 EMT(1)
ACC NMR AN029120

SOURCE CODE: UR/0048/66/030/006/1008/1008

AUTHOR: Doryugin, I. A.; Melkov, G. A.

ORG: none

TITLE: On the frequency of parametrically excited spin waves /Report, All-Union Conference on the Physics of Ferro- and Antiferromagnetism held 2-7 July 1965 in Sverdlovsk/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 6, 1966, 1008

TOPIC TAGS: spin wave, ferrite, frequency doubling, parametric resonance

ABSTRACT: The authors have investigated the relation between the pumping power P at frequency f_k , the wave vector k , and the polar angle θ_k of parametrically excited spin waves under conditions of saturation of the fundamental resonance. The wave vector was eliminated with the aid of the dispersion equation of H.Suhl (J. Phys. Chem. Soc., 1, No. 4, 209 (1957)), and the polar angle was calculated from plots of the second harmonic power as a function of the pumping power. Second harmonic production by spin waves can exceed the usual frequency doubling effect in ferrites by a factor of 2 or 3. Experimental data on a 3 mm diameter yttrium iron garnet sphere at a second harmonic frequency of 9.37 MHz are presented. No frequencies other than $2f$ were observed, from which it is concluded that the equation $f_k = f$ is strictly satisfied. The

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L 08753-67

ACC NR: AP6029120

polar angle did not drop immediately to zero when the second order instability threshold of Suhl was exceeded, but decreased gradually with increasing pumping power. When θ_k reached 43° (at a pumping power about 7 db above the threshold) the oscilloscope display became unstable and further measurements were impossible, but it is presumed that θ_k fell rapidly to zero with further increase of the pumping power. The present data are in agreement with (but provide more information than) those of C.W. Haas, T.J.Matcovich, H.S.Belson, and N.Goldberg (Phys. Rev., 132, No. 5, 1963), which were obtained by a resonance shift method. Orig. art. has: 1 formula and 1 figure.

SUB CCDE: 20/

SUBM DATE: 00/

ORIG REF: 000/

OTH REF: 003

Card 2/2 bc

L 40038-66 EWP(k)/EWT(d)/EWT(m)/EWP(h)/EWP(1)/EWP(v)/EWP(t)/ETI IJP(c) JH/JD/HW
 ACC NR: AP6017297 (A) SOURCE CODE: UR/0136/66/000/005/0075/0079

AUTHORS: Epshteyn, G. G.; Melkov, K. I.

31

B

ORG: none

TITLE: Apparatus for cold pressing of pipes from aluminum alloys

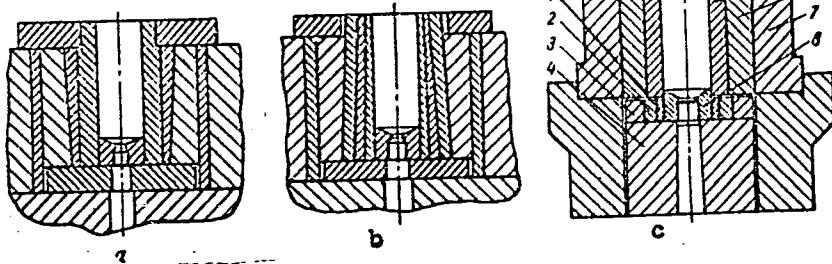
SOURCE: Tsvetnyye metally, no. 5, 1966, 75-79

TOPIC TAGS: metallurgical machinery, metal forming machine tool, metal forming press,

cold forging, pipe, forge press

ABSTRACT: A machine for cold forging of aluminum alloy pipes is described, and schematics of the different machine parts are presented (see Fig. 1). The composition

, Fig. 1. Die assembly for
 pressing of pipes of 10 x
 1 mm diameter. a - scheme
 I; b - scheme II; c -
 scheme III; 1, 2, 3, die
 rings I, II, III; 4 -
 washer, 5 container
 bushing; 7 - yoke;
 8 - die, 6 - bushing.



UDC: 669.715:621.774.35

Card 1/2

L 40038-66

ACC NR: AP6017297

of the various machine parts is also tabulated, as are the results of the performance of the machine as it was tested during the manufacturing of different size pipes. It is concluded that in order to insure high quality of pipes it is necessary to exercise some care in the selection of the proper die parts material and in their thermal and mechanical treatment. Orig. art. has: 4 graphs and 2 tables.

SUB CODE: 13/ SUBM DATE: none

Card 2/2 2/2

MELKOV, M.P., kandidat tekhnicheskikh nauk, dotsent.

Reconditioning machine parts by means of electrolytic hardening. Vest.
mash. 33 no.3:50-54 Mr '53. (MLBA 6:5)

1. Saratovskiy avtoremontnyi zavod.

(Hard-facing)

MELKOV, M.P.; POPOV, V.Ya., redaktor; TAMAROVICH, M.A., redaktor; GURO-
VICH, V.A., tekhnicheskiy redaktor.

[Restoration of automobile parts by electrolytic acieration]
Vosstanovlenie detalei avtomobilei elektroliticheskim stalivaniem.
Moskva, Izd-vo Ministerstva komunal'nogo khoziaistva RSFSR, 1954.
162 p.

(Automobiles--Repairing) (Electroplating)

MELKOV, M.

The technological process of "hard steeling." Avt.transp.33
no.7:22-24 J1'55. (MIRA 8:12)

1. Saratovskiy avtomobil'no-dorozhnyy institut
(Electroplating)

MELKOV, MIKHAIL PETROVICH

MELKOV, Mikhail Petrovich; SHULUKHIN, A.S., red.; KOGAN, F.L., tekhn.red.

[Restoration of automobile and tractor parts by means of electrolytic
steeling] Vosstanovlenie avtotraktornykh detalei elektroliticheskim
ostalivaniem. Izd. 2-oe, perer. Moskva, Nauchno-tekhn.izd-vo
avtotransp.lit-ry, 1957. 196 p. (MIRA 11:3)

(Electroplating)

(Automobiles--Maintenance and repair)

(Tractors--Maintenance and repair)

MELKOV, M.P., kand.tekhn.nauk, dotsent

Development of the reconditioning of machine parts by means of
steel plating. Trudy SUDI no.16 pt.1:102-114 '59. (MIRA 13:11)
(Machinery--Maintenance and repair)
(Iron plating)

ABELEVICH, A.A.; ARTEM'YEV, Yu.N.; VLASOV, A.P.; GAL'PERIN, A.S.; YEVSIKOV, A.V.; IVANOV, G.P.; KOROLEV, N.A.; LEVITSKIY, I.S.; LIVSHITS, L.G.; MELIKOV, M.P.; NAZAROV, N.I.; NOVIKOV, M.P.; POPOV, V.Ya.; TEPLOV, A.G.; BAKHAREV, A.P., inzh., retsenzent; SAVELYEV, Ye.Ya., red. izd-va; MODEL', B.I., tekhn. red.; EL'KIND, V.D., tekhn. red.

[Technological aspects of the repair of crawler vehicles] Tekhnologija remonta gusenichnykh mashin. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry 1960. 466 p. (MIRA 14:7)
(Crawler vehicles—Maintenance and repair)

MELKOV, Mikhail Petrovich; VOSKRESENSKIY, N.N., red.; STRYZHKOVA, N.I.,
red. izd-va; BUDANOVA, A.P., tekhn. red.

[Hard iron plating of parts of motor vehicles and tractors]
Tverdoe ostalivanie avtotraktornykh detalei. Moskva, Avtotransizdat, 1962. 270 p.
(Iron plating)

J0104
S/080/62/035/004/011/022
D217/D301

11800

AUTHORS: Melkov, M. P., Pankratov, M. P., and Babenko, V. A.

TITLE: Adhesion of iron coatings deposited from chloride electrolytes

PERIODICAL: Zhurnal prikladnoy khimii, v. 35, no. 4, 1962, 803-808

TEXT: Anodic treatment of components in a 30% sulphuric acid solution prior to hard iron deposition is known to be the most effective operation in preparing the metal surface to ensure subsequent satisfactory adhesion of the coating. However, in most cases it is also necessary to suspend the components in the plating bath without switching on the current, prior to electrodeposition. The initial current density used is 4 - 5 times lower than the working one and is increased to the nominal value with 3 - 5 minutes. The authors have expressed the opinion that suspending components in the bath without passing current serves the purpose of preheating the cathode layer of the electrolyte. This assumption is based on the fact that preheating the components in water prior to plating also X

Card 1/3

S/080/62/035/004/011/022
D217/D301

Adhesion of iron ...

ensures good adhesion to the deposit. The question arises to what temperature the cathode layer of electrolyte must be preheated. From experience it is known that good adhesion can be obtained at 50 - 60°C and lower temperatures. However, a bath maintained at 60°C is operated at a hydrochloric acid concentration of 2.5 - 3.0 g/l instead of 0.5 - 0.8 g/l, i.e. at concentrations suitable for a solution working at 80°C. In order to study the changes in electrolysis conditions in relation to electrolyte temperature, polarization curves were plotted at 25, 40, 60 and 80°C, using an electrolyte containing 200 g/l $\text{FeCl}_2 \cdot 4\text{H}_2\text{O}$ and 0.8 g/l HCl. The electrolysis cell was placed in a thermostat; a 0.45% C steel plate of 1 cm² surface area was used as cathode, the anode being electrolytic iron. The cathode potential was measured against a saturated calomel electrode. It was found that adhesion of the coating to the base metal in the deposition of hard iron, using a deposition method developed at the Saratov Polytechnic Institute, exceeds 4500 kg/cm². A qualitative relationship was found to exist between the adhesion of the coating on the one hand, and temperature and

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acidity of electrolyte on the other. A higher hydrogen current efficiency during the first moment of electrolysis was established to be necessary in order to activate the cathode surface. Finally, it was established that the optimum soaking period without passage of current in the iron plating bath at constant bath temperature is a function of the acidity of the electrolyte and diameter of the components. There are 3 figures and 6 Soviet-bloc references.

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MELKOV, Mikhail Petrovich, doktor tekhn. nauk; FOFANOVA, L., red.

[Electrolytic building-up of machine parts with solid iron]
Elektricheskoe narashchivanie detalei mashin tverdym zhelezom. Saratov, Frivolzhskoe knizhnoe izd-vo, 1964. 203 p.
(MIRA 17:10)

MEL'KOV, N.

Ship propelled above the sea surface [from "Shipbuilding and
Shipping Record," no.23, 1959]. Rech.transp. 19 no.1:3 of
cover Ja '60. (MIRA 13:5)
(Great Britain--Hydroplane boats)